

North Indian *Oniticellus imbellis*, Bates, and was named by Reiche *O. fuscopunctatus*, F.; but by the kindness of Dr. Adam Bóving, of Copenhagen, who has made for me an excellent drawing of the Fabrician type specimen, I am able to state that that is a species of *Onthophagus*, very much smaller and entirely unlike the insect here described. Reiche is responsible also for the manuscript name "*modestus*, Dej.," which I have adopted.

Oniticellus modestus is closely related to the African *O. spinipes*, Roth, for which Mr. Péringuey has formed a new genus *Tiniocellus*, which he has widely separated from *Oniticellus* by reason of his counting only eight joints in the antenna. This is an error, for there are nine joints, and these species cannot be separated from *O. cinctus*, F., *planatus*, Lap., *formosus*, Chev., &c.

I may take this opportunity of noting that Mr. Péringuey has incorrectly given the last-named species as a synonym of the S.-African *O. pictus*, Hausm. *O. formosus*, Chev., is a West-African insect, larger than *O. pictus* and differing in the form of the clypeus and other respects.

XXIX.—On the Generic Names of the Rupicaprine Ruminants known as Serows and Gorals. By R. I. POCKOCK, Superintendent of the Zoological Society's Gardens.

THE rupicaprine ruminants commonly known as Serows and Gorals were first dismembered from the genus *Antelope* by Hamilton Smith in 1827 (Griffith's An. Kingdom, v. p. 352). This author grouped under the subgenus *Næmorhedus** the three species *sumatrensis*, Shaw, *duvaucelii*, H. Sm., and *goral*, Hardw. One of these must be the type of *Næmorhedus*.

In 1834 Hodgson (P. Z. S. 1834, p. 85) adopted *Næmorhedus* for the same species, with the addition of the Nepalese form described by himself as *thar*. Although clearly recognizing that the four species ought to be affiliated in pairs, *N. goral* and *N. duvaucelii* forming a group apart from *N. sumatrensis* and *N. thar*, Hodgson himself did not divide *Næmorhedus* into two genera or subgenera, nor select one of the species as its type.

The next writer to deal systematically with the question, namely Ogilby (P. Z. S. 1836, p. 138), pointed out that

* I preserve the original spelling of the name throughout this paper, and ignore the emendations that have been proposed.

goral and *thar* are generically distinct. For the former he introduced the genus *Kemas*, for the latter *Capricornis*, entirely setting *Næmorhedus* aside. Now *Kemas*, or, rather, *Cemas*, had been previously used by Oken (Lehrb. Zool. ii. p. 727, 1816) for a series of antelopes of which *goral* was not one. Hence, if it be maintained that *Kemas* and *Cemas* are, strictly speaking, the same names, *goral* cannot be the type of *Kemas*. If, on the other hand, the difference in the formation of the initial letters "K" and "C" be regarded as a sufficient reason for considering the names different, *goral* might be the type of *Kemas*, and some other antelope, say *gnu*, according to Messrs. Sclater and Thomas's selection ('Book of Antelopes,' i. pt. ii. p. 93, 1895), the type of *Cemas**. Since Ogilby quotes no authorities for any of the genera cited in his paper, it is impossible to say whether he was aware of Oken's use and spelling of the name or not. Ogilby, indeed, left the matter in a most perplexing and unsatisfactory state, on account of his disregard of the claims of *Næmorhedus*, which, by the law of priority, must supersede either *Kemas* or *Capricornis*. This appears to me to be clearly a case where the decision of the next reviser, if lawfully made, should be adhered to. This was Gray. When he published his 'List of Mammals in the British Museum' in 1843 †, the generic nomenclature of the group stood as follows:—

Næmorhedus, containing *sumatrensis*, *duvaucelii*, *goral*.
Kemas, ,, *goral*.
Capricornis, ,, *thar* (= *bubalina*).

Now Gray followed Ogilby in admitting the two genera defined by that author as *Kemas* and *Capricornis*. He reserved *Capricornis* for *thar* (= *bubalina*) and adopted *Næmorhedus* for *goral* and *sumatrensis*. His association of these two species was apparently due to his being acquainted only with the horns of *sumatrensis*. This mistake, however, in nowise affects the fact that he dropped *Kemas*, Ogilby, as a synonym of *Næmorhedus* and did not drop *Capricornis*. His reason for this was quite obvious and natural and wise, namely, that *Kemas* was, in his opinion, preoccupied as *Cemas*, Oken (see p. xxvi of the introduction to the List

* This selection can, I imagine, only hold good if the type of *Cemas* had not been previously fixed by elimination.

† In 1841 (Journ. As. Soc. Bengal, p. 913) Hodgson referred *goral* and *thar* to "*Næmorhedus* vel *Kemas*." But since he thus merely reverts to his original view as to the two species being congeneric, his paper does not affect the question at issue.

Mamm. in B. M.). But, whatever the reason for his action may have been, I do not see how his decision, since the choice rested with him, can possibly be set on one side. In his subsequent works (Ann. & Mag. Nat. Hist. xiii. p. 232, 1846; List Ost. Spec. in B. M. 1847, p. 57; P. Z. S. 1850, pp. 135-136; and Cat. Mamm. Ung. iii. pp. 110-114, 1852) he confirmed his verdict and brought his system into conformity with modern views. He correctly withdrew *sumatrensis* from *Næmorhedus*, ranged it with *thar* (= *bubalina*) under *Capricornis*, and left *goral* with *duvaucelii* as its synonym as the sole representative of *Næmorhedus*.

It was subsequently stated by Jerdon ('Mammals of India,' 1867, p. 283), and, following him, by W. L. Sclater (Cat. Mamm. Ind. Mus. p. 147, 1891), that *sumatrensis* is the type of *Næmorhedus*. I can find no evidence for, much less proof of, the truth of this statement. If true it would invalidate Gray's nomenclature. Since it appears to be unfounded, I see no escape from the adoption of that author's settlement of the question.

Of authors who succeeded Gray, some—like Horsfield (P. Z. S. 1856, p. 403), Adams (P. Z. S. 1858, pp. 522-523), and Blyth (Cat. Mamm. As. Soc. p. 174, 1863, and Burma List, p. 46, 1875)—followed his nomenclature; others—like Turner (P. Z. S. 1850, p. 173), Jerdon, M.-Edwards (Rech. Mamm. 1868-1874), and W. L. Sclater—reverted to the original view of H. Smith and Hodgson that the Gorals and Serows are congeneric and to be entitled *Næmorhedus*.

In 1891, however, Dr. Blanford (Mamm. Brit. India, pp. 513 & 516) pointed out that Ogilby was right in separating the two, and, agreeing apparently with Jerdon that *sumatrensis* was the type of *Næmorhedus*, he adopted the inadmissible name *Cemas* for the Gorals and *Næmorhedus* for the Serows, entirely ignoring Gray's previous settlement of the question. Without further inquiry into the matter, Trouessart adopted Blanford's view (Cat. Mamm. i. p. 964, 1898), merely compromising the question by classifying the species under *Næmorhedus* with *Kemas* and *Næmorhedus* (s. s.) as subgenera.

In 1900 Mr. Lydekker ('Great and Small Game of India,' p. 136) complicated the subject still further by following Blanford, but with the substitution of *Urotragus* for *Cemas*, on the grounds of the inadmissibility of *Cemas* or *Kemas* for the Gorals. This system of nomenclature was adopted by Trouessart in 1905 (Cat. Mamm., Suppl. p. 734), and it reappears in the second edition of Mr. Lydekker's above-quoted work published in 1907. *Urotragus*, it should be

explained, was a generic name proposed by Gray in 1871 for the long-tailed Chinese Goral described as *Antilope caudata* by A. Milne-Edwards. This species, however, is not usually admitted to be generically distinct from the Himalayan form.

Although it has been suggested to me that *Kemas* of Ogilby should be regarded as a different name from *Cemas* of Oken because of the optical and, to those who pronounce the initial "C" as a sibilant, phonetic differences between "C" and "K," I nevertheless agree with Gray, and, following him, with Mr. Lydekker and M. Trouessart, that "C" and "K" in this and analogous cases must be looked upon as identical letters.

But, whatever the ultimate verdict on this point may be, *Kemas* cannot, in my opinion, be reserved for the Gorals, because of Gray's decision to call these animals *Næmorhedus*. And this action on the part of Gray similarly disposes of the claims of *Urotragus* to generic recognition so long as *caudatus*, the type of *Urotragus*, is regarded, as I think it should be, as congeneric with *goral*, the type of *Næmorhedus*.

In 1894 Heude (*Hist. Nat. Chinois*, ii. pp. 222 & 234) followed Ogilby's nomenclature, adopting *Capricornis* and *Kemas*, which he characterized; but in 1898 (*op. cit.* iv. pp. 13-14) he broke up *Capricornis* as follows:—

1. *Capricornis* for *thar*, *chrysochaetes*, *fargesianus*, *longicornis*, *brachyrhinus*, *nasutus*.
2. *Nemotragus*, nov., for *erythropygus*, *platyrhinus*, *cornutus*, *ungulosus*, *microdonticus*, *argyrochaetes*.
3. *Lithotragus*, nov., for *maritimus*, *rocherianus*, *benetianus*, *marcolinus*, *berthelianus*.
4. *Capricornulus*, nov., for *crispus*, *pryerianus*, *saxicola*.
5. *Austritragus*, nov., for *sumatrensis*.

It is quite beyond my purpose, if it was within my power, to deal with these so-called species*; and the adoption by

* With the exception of *thar*, *crispus*, and *sumatrensis*, the names enumerated above were applied by Heude to what he believed to be new species inhabiting China and Japan. With regard to the Chinese forms, I find it impossible to believe that they should rank as "species" in the ordinarily accepted sense of the word. Probably a subspecific value should be assigned to some of them, possibly a higher value to a few. Many of the features, again, upon which the "species" rest may be attributable to differences of age or of sex or of season, or to individual variation irrespective of such conditions. It is impossible to say, the provokingly involved and verbose nature of the text making the attempt to clear up the questions raised one upon which few will attempt to embark without localized material. Nevertheless, it must be admitted that the papers of Heude have a certain value and interest, inasmuch as the observations they record substantiate

Heude of Ogilby's generic names does not affect the question as to what is the type of *Nemorhedus*, except in so far as his use of the name *Capricornis* may silence those who might otherwise maintain that this name should be dropped on the grounds of its failure to receive recognition at the hands of modern writers.

The following is a list of the generic names that have been proposed for the Serows and Gorals. Since it is desirable that every generic name, whether admitted at the present time or not, should be definitely assigned to a particular species as its type, I have, without prejudice, selected a type for each of those proposed by Heude. Only one of these, however, namely *Capricornulus*, has, in my opinion, any claim to recognition, *Lithotragus*, *Nemotragus*, and *Austritragus* being complete synonyms of *Capricornis*. *Capricornulus* may, perhaps, be admitted on the grounds that the lacrymal bone forms a very short union with the nasal in the typical species *crispus*, which in this particular approaches *Nemorhedus* and differs from *Capricornis*.

Nemorhedus, H. Smith, 1827. Type by Gray's revision of 1843 and 1846 *goral*, Hardwicke.

Capricornis, Ogilby, 1836. Type ab initio *thar*, Hodgson*.

Kemas, Ogilby, 1836. Type ab initio *goral*, Hardwicke.

Urotragus, Gray, 1871. Type ab initio *caudatus*, M.-Edwards.

Austritragus, Heude, 1898. Type ab initio *sumatraensis*, Bechstein †.

Capricornulus, Heude, 1898. Type by selection *crispus*, Temm.

the fact that considerable variation in the colour of the pelage, the structure of the skull, and the size and shape of the horns exists in specimens of *Capricornis* and *Nemorhedus* occurring in the Chinese area. And however much one may secretly sympathize with the omission of the generic and specific names Heude proposed from Zoological Records, the morality of this proceeding is open to question, at all events, on the grounds that the record of such names, once published, must be preserved if only to prevent their subsequent use in a different sense by authors ignorant of their preoccupation.

* 'Gleanings,' iii. p. 324 (Oct. 1831). In 1832 (P. Z. S. p. 12) Hodgson substituted *bubalina* for *thar*, and of late years the species has been, after Blanford's example, erroneously cited as *bubalinus*.

† 'Uebersicht vierfüss. Thiere,' i. p. 98 (1799). Up to the present time this species has been always cited as *sumatrensis*, Shaw, 1801.

Lithotragus, Heude, 1898. Type by selection *maritimus*, Heude.

Nemotragus, Heude, 1898. Type by selection *argyrochætes*, Heude.

Allowing *Capricornulus* to stand, at all events provisionally, the above-mentioned genera may be reduced to the following three:—

1. *Capricornis*, Ogilby (= *Lithotragus*, Heude + *Nemotragus*, Heude + *Austritragus*, Heude).
2. *Capricornulus*, Heude.
3. *Næmorhedus*, H. Smith (= *Kemas*, Ogilby + *Urotragus*, Gray).

NOTE.—When revising the names of the Serows and Gorals I came across a hitherto unnoticed synonym of the Nilgiri wild goat (*Hemitragus hylocrius*). The reference is as follows:—" *Capra Neilgherri*, H. A. Leveson, Sport in many Lands, p. 238, pl. iv. fig., ? 1876." My copy of this volume bears no date; but since it belonged apparently to the first edition, and contains a memoir of the author ("The Old Shekarry"), who died in 1875, the date of the name in question may be placed as probably not earlier than 1876.

XXX.—On Muscardinidæ from the Iberian Peninsula.

By ANGEL CABRERA.

SPANISH and Portuguese dormice are, for the most part, badly worked, no two authors agreeing as to the number and geographical distribution of species. Of *Eliomys* especially several apparently different forms have been described, partly by myself, the validity of which requires to be discussed. Since the publication of my paper on Spanish *Eliomys** my opinion on this subject has been somewhat modified, as a result of the examination of much new material, including a fine series mainly collected by Mr. Gerrit S. Miller, to whose kindness I owe the opportunity of examining it.

In the present paper I give a summary of my conclusions on the whole family, as represented in the Iberian Peninsula.

* Bol. Real Soc. Españ. de Hist. Nat. 1904, p. 180.